What is Claimed is:

1. A composition comprising Nogo-B or a fragment of Nogo-B that retains a biological activity of NogoB.

2. The composition according to claim 1, wherein the biological activity is selected from the group consisting of:

(a) promoting in a vascular endothelial cell cellular adhesion, cellular spreading, cellular migration and/or proliferation;

(b) inhibiting in a vascular smooth muscle cell migration;

(c) reducing pathological vascular remodeling;

(d) reducing neo-intima formation in a blood vessel;

(e) promoting angiogenesis;

(f) maintaining vascular homeostasis;

(g) promoting wound healing;

3. The composition according to claim 1, wherein the fragment comprises amino acids 1-200 of Nogo-B.

4. The composition according to claim 1 comprising full length Nogo-B.

5. The composition according to claim 1 wherein the Nogo-B is human.

6. The composition according to claim 1 which comprises a pharmaceutically acceptable carrier.

7. The composition according to any one of claims 1-6, further comprising one or more additional components selected from the group consisting of: an excipient, a therapeutic agent, a diagnostic agent and a Nogo-B agonist.

8. The composition according to claim 7, wherein the additional therapeutic agent is selected from the group consisting of: an anti-inflammatory agent, an anti-coagulant- an anti-fibrotic agent; anti-hypertensive agent, lipid-lowering agent, immuno-suppressive agent.

9. The composition according to claim 1 wherein the Nogo-B fragment is detectably labeled.

10. The composition according to claim 9, where in the detectable label is selected from the group consisting of:

11. A composition comprising a Nogo-B antagonist.

12. The composition according to claim 11, wherein the NogoB antagonist is selected from the group consisting of: a monoclonal antibody, siRNA, an antisense nucleic acid, a ribozyme, a soluble peptide and a small molecule.

13. The composition according to claim 11 comprising one or more additional components selected from the group consisting of: a pharmaceutically acceptable carrier, an excipient; a therapeutic agent and a diagnostic agent.

14. The composition according to claim 11, wherein the Nogo-B antagonist is detectably labeled.

15. A fragment of Nogo-B that retains a biological activity of Nogo-B.

16. A fusion protein comprising the fragment of Nogo-B according to claim 15 and an additional component.

17. The fusion protein according to claim 16, wherein the additional compound is selected from the group consisting of: GST, AP , immunoglobulin Fc, and cell permeable peptides.

18. A nucleic acid molecule comprising a nucleotide sequence encoding the Nogo-B fragment according to claim 15 or the fusion protein according to claim 16.

19. The nucleic acid molecule according to claim 18, operably linked to an expression control sequence.

20. A vector comprising the nucleic acid molecule according to claim 18.

21. The vector according to claim 20 selected from the group consisting of: AAV (adeno-associated virus), lentivirus, adenovirus, retrovirus, Herpes virus.

22. A host cell comprising the nucleic acid molecule according to claim 18 or the vector according to claim 20.

23. An antibody that specifically binds the Nogo-B or an antigen-binding portion thereof.

24. The antibody or portion according to claim 23 wherein the Nogo-B is human.

25. The antibody or portion according to claim 23 which is monoclonal.

26. The antibody or portion according to claim 23 which is human, humanized or chimeric.

27. The antibody or portion according to claim 23, wherein the antigen-binding portion is selected from the group consisting of: F(ab); F(ab)', F(ab)'2, a single chain Fv, Fd, Fv and a dAb.

28. The antibody according to claim 23 which is a Nogo-B antagonist.

29. The antibody according to claim 23, which is a Nogo-B agonist.

30. A composition comprising the antibody according to any one of claims 23-29.

31. The composition according to claim 30, further comprising a component selected from the group consisting of: a pharmaceutically acceptable carrier, an excipient, a therapeutic agent and a diagnostic agent.

32. A method for producing the fragment of Nogo-B according to claim 15 or the fusion protein according to claim 16 comprising the step of culturing the host cell according to claim 22 under suitable conditions.

33. A method for producing the antibody according to claim 23 comprising the steps of immunizing a non-human animal with Nogo-B or an immunogenic fragment thereof under conditions suitable for eliciting an immune response and recovering the antibody from the animal.

34. A nucleic acid molecule comprising a nucleotide sequence encoding the heavy chain or the light chain of

antibody or portion according to any one of claims 23-27.

35. A vector comprising the nucleic acid molecule according to claim 34.

36. A host cell comprising the nucleic acid according to claim 34.

37. A method for producing the antibody or portion according to any one of claims 23-27, comprising culturing the host cell according to claim 36 under suitable conditions.

38. A method for detecting a subject in need of treatment with Nogo-B or a fragment thereof that retains a biological activity of Nogo-B comprising administering a detectably labeled molecule that binds NogoB and detecting the absence of Nogo-B.

39. A method for promoting angiogenesis in a subject in need thereof comprising the step of administering a composition according to claim 1.

40. A method for treating a disease or condition characterized by the absence of desired angiogenesis in a subject in need thereof comprising the step of administering a composition according to claim 1.

41. The method according to claim 40, wherein the disease or condition is selected from the group consisting of: coronary artery disease, wound healing, peripheral vascular disease associated with diabetes, peripheral vascular disease, peripheral artery disease.

42. A method for treating or preventing a condition or disease characterized by pathological vascular remodeling in a subject in need thereof comprising the step of administering a composition according to claim 1.

43. The method according to claim 42, wherein the disease or condition is selected from the group consisting of: hypertension, restinosis, transplant vasculopathy, arteriosclerosis, ischemia, pulmonary hypertension, asthma, myocardial infarction and cerebrovascular infarction.

44. A method for promoting vascular quiescence in a subject in need thereof comprising the step of administering a composition according to claim 1.

45. The method according to claim 44, wherein the subject suffers from a condition selected from the group consisting of: asthma, hypertension, pulmonary hypertension.

46. A method for inhibiting angiogenesis in a subject in need thereof comprising the step of administering a Nogo-B antagonist.

47. A method for treating or preventing a condition characterized by undesired angiogenesis in a subject in need thereof comprising the step of administering a Nogo-B antagonist.

48. The method according to claim 46 or 47, wherein the subject suffers from a condition selected from the group consisting of: cancer, retinopathy, rheumatoid arthritis, atherosclerosis, and arteriosclerosis.

49. A method for reducing neointima formation in a blood vessel in a subject in need thereof comprising the step of administering a composition according to claim 1.

50. A method for inhibiting vascular injury-induced vascular narrowing or occlusion in a subject comprising the step of administering a composition according to claim 1.

51. A method for preventing vascular injury induced ischemia comprising the step of administering a composition according to claim 1.

52. A method for endothelial cell adhesion, spreading and migration comprising the step of contacting the cell with Nogo-B or a fragment thereof that retains a biological activity of Nogo-B.

53. A method for inhibiting vascular smooth muscle cell migration comprising contacting the cells with Nogo-B or a fragment thereof that retains a biological activity of Nogo-B.

54. A method for treating a subject suffering from a vascular injury comprising the step of administering a composition according to claim 1.